

Remarks

The present invention relates to a device including a foot pedal connected to a clutch activating link. A pawl and ratchet escapement is mounted on the shaft carrying the foot pedal. When the foot pedal is depressed, the clutch activating link disengages the clutch and the pawl engages the ratchet, keeping the foot pedal from rising even though the rider may remove his foot from the foot pedal. Further depression of the foot pedal disengages the pawl from the ratchet, allowing the foot pedal to rise. As the foot pedal rises, the clutch activating link gradually allows the clutch to reengage.

The Office Action

Claims 8, 9, 17 and 18 were indicated as allowable if rewritten in independent form. In these claims, the pawl and ratchet escapement mechanism is further described as including a piston which displaces the pawl in and out of engagement with the ratchet. The piston is activated by a cam, which like the pawl and ratchet, is mounted on the foot pedal shaft. Independent claims 1 and 11 have been amended to require that the pawl and ratchet escapement mechanism be mounted on the transverse shaft to which the foot pedal is also mounted. A similar amendment has been made in independent claim 20.

Rejection of Claim 20 under Section 102

Claim 20 was rejected under Section 102 as being anticipated by U.S. patent No. 2,028,198 to Elliott. It is believed that this rejection has been overcome by amendment. Elliott describes a mechanism for activating a cylinder (18). When the cylinder (18) is activated, it pulls a rod (19) to the right (as viewed in Fig. 1),

keeping arm (15) from rotating and the clutch disengaged. Foot pedal is mounted on a shaft shown in the drawings but not numbered.

A second mechanism (lever 23 and latch 28), not mounted on the same shaft as the foot pedal, is provided for opening and closing a valve (21). After the latch (28) is caught in a notch (29), the user can take his foot off pedal (14) which will rise. When the operator wants to reengage the clutch, he presses down on pedal 14 which causes a pin to cam along the underside of the latch (28) disengaging it from it from the notch (29) in the lever (23). As soon as the latch (28) is disengaged, the lever (23) closes the valve (21). As the pressure in the line (20) falls, the cylinder (18) loses pressure and the rod (19) moves to the left reengaging the clutch. In applicant's construction, the foot pedal does not rise until the pawl and ratchet haven been disengaged. For this purpose, the pawl and ratchet and the foot pedal are on the same shaft.

In view of the above remarks it is believed that claims 20 is patentable over Elliott. As regards the various "means" in claim 20, applicant invokes Section 112, sixth paragraph.

Rejection of Claim 20 under Section 103

As a second basis for rejection, claim 20 was rejected as obvious over Elliott in view of U.S. patent No. 1,814,896 to Chartier. The Patent Office uses Chartier as the motivating basis for adapting Elliott's teaching to a motorcycle. As discussed above, Elliott does not show a mechanism which is the same or even

comparable to applicant's. Hence whether it would be obvious to apply Elliott's teaching to a motorcycle in view of Chartier is moot.

Chartier describes a pair of linked hydraulic cylinders (32, 33). When the clutch pedal (30) is pushed down, a piston (49) in the lower cylinder (33) moves to the right as shown in Fig. 7 and a valve mechanism shown in Figs. 8-10, allows hydraulic fluid in the upper cylinder (32) to backfill lower cylinder (33) behind the piston (49). When the rider wants to reengage the clutch, he steps on a release pedal (52) which unseats a ball in the valve, freeing piston (49) to move to the left and allowing the clutch to be reengaged.

Applicant's construction differs in material respects: (1) It is not a hydraulic system and (2) In applicant's device, the pawl and ratchet are disengaged by stepping on the clutch pedal, not a separate release pedal as in Chartier. On a motorcycle, the fewer separate pedals, switches and the like, the better as there is little space and a "misstep" may be dangerous.

In view of the amendments to claim 20 and the above remarks, it is believed that the claim is to unobvious subject matter.

Rejection of Claims 1-3, 5 and 10-13 under Section 103

Applicant's claims 1-3, 5 and 10-13 were rejected as unpatentable over U.S. patent No. 4,041,798 to Shinozaki et al. in view of Chartier.

Shinozaki et al. describes a pawl and ratchet system for locking a brake pedal (28) in brake applied position. A kick stand (70) causes a cam to engage and disengage the pawl and ratchet. This action is mediated by a lever (74) on the kick stand that contacts a link (80).

Assuming arguendo that it would be obvious to combine Shinozaki et al.'s teachings to Chartier, the result would be a system for locking the brake pedal in brake applied position. Chartier would still need his hydraulic system for keeping the clutch pedal locked down. As discussed above, applicant's system and Chartier's as to control of the clutch are materially different. Hence is believed that applicant's claims 1-3, 5 and 10-13 are patentable over Shinozaki et al. in view of Chartier.

Rejection of Claims 4, 6, 7, 14, 15 and 16 under Section 103

Claims 4, 6, 7, 14, 15 and 16 were rejected as unpatentable over Shinozaki et al. in view of Chartier as applied to claims 1-3, 3, 5 and 10-13 and further in view of Elliott. Applicant responds by pointing out that there is no motivation for the combination:

Shinozaki et al. teaches a mechanism for locking the rear brake in brake applied condition and has nothing to do with control of the clutch.

Applying Shinozaki et al. to Chartier provides a motorcycle with a hydraulic mechanism for controlling release of the clutch pedal and a pawl and ratchet mechanism for locking the rear brake in brake applied position. This is not applicant's construction.

Adding Elliott to the combination adds a release button (24) which must be disengaged so that the clutch, which is held disengaged by vacuum pressure, to be reengaged. Whereas in applicant's construction, the clutch pedal, the pawl and ratchet and the cam are all on the shaft and operated by pressing on the clutch pedal.

Rejection of Claim 19 under Section 103

Claim 19 was rejected as unpatentable over Shinozaki et al. in view of Chartier and further in view of U.S. patent No. 2,540,926 to Zook. The last patent was cited as showing a mounting plate for attaching a mechanism for converting a foot-operated clutch control into a hand-operated clutch control. Attaching either Shinozaki et al.'s brake locking system to Chartier's hydraulically operated clutch system with Zook's plate does not result in applicant's construction. Hence whether the combination is motivated or not is irrelevant as the result is not applicant's construction.

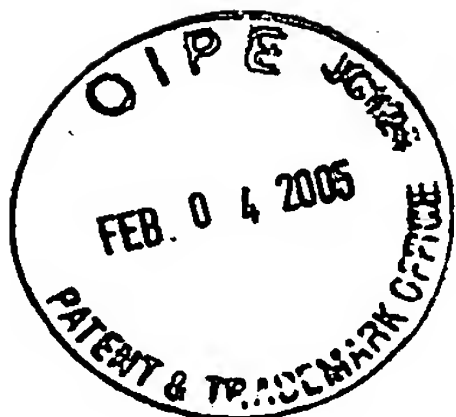
In view of the above amendments and remarks it is believed that the claims are in condition for allowance. Reconsideration of the application and allowance of the claims are respectfully requested.

Respectfully submitted,



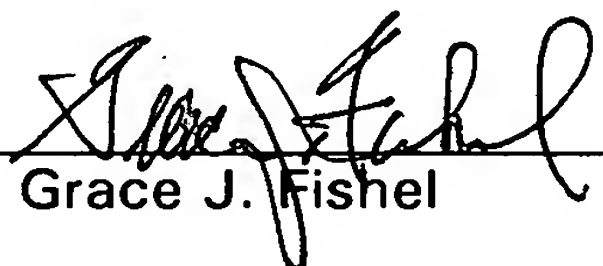
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